

# **KING COUNTY**

## **Regional Communications & Emergency Coordination Center (RCECC)**



**Summer 2003**

# King County's Regional Communications and Emergency Coordination Center (KC RCECC) Fact Sheet

## Purpose

The Purpose of the KC RCECC is to:

- Provide a building to accommodate both the present and future requirements of the King County Sheriff's Office 911 Communications Center and County's Office of Emergency Management (OEM). This facility provides the office space for the daily business of the Communications Center and OEM.
- Ensure alert and warnings are provided countywide to county departments, communication centers, cities, and the public.
- Provide a facility for county and state agencies, selected regional businesses as well as key public and private utilities to send agency representatives to coordinate actions during disasters.
- Collect and coordinate information from county agencies, cities, districts, and private industry and communicate information to the public.
- Serve as the site where senior county officials will provide direction to county departments and facilitate coordination of regional response and recovery actions.
- Provide operational capabilities for sheriff's department and emergency management activations 24 hours per day, 7 days per week, and 365 days per year.



## **The Building**

The RCECC is a secured “hardened” building designed to survive a major earthquake and remain functional. The 34,780 square foot facility is a newly designed and constructed one-story building located in the City of Renton, adjacent to King County DOT’s Roads Maintenance facilities. The E911 Communications Center occupies 12,401 square feet and includes a dispatch center, private offices, storage and recorder/playback rooms, staff restrooms with showers, and training rooms. The OEM occupies 8,300 square feet and includes the main coordination room, associated breakout rooms, audio-visual display system and support spaces, a radio room, and administration office space. The Lobby, Policy/Conference Room, Training/Media Rooms, Kitchen/Break Rooms and the Telecomm/Server room, takes up the shared space of 12,747 square feet.

The building is a combination of concrete and metal panel siding with sloped metal roofs and clerestory glass. It consists of two “wings”; one of which houses the King County Sheriff’s call and dispatch operations, offices, locker room and building technical spaces, the other houses the Office of Emergency Management Coordination room, offices, Audio/Visual systems, break-out rooms and a Amateur Radio room. In between the wings, the center of the building houses shared spaces including the lobby, Policy/Conference room, training room, and kitchen/break room.

Other points of interest include:

- Secure parking for 72
- Overflow/activation parking for 71
- Visitor Parking for 30 (including space for media trucks)
- Restrooms with Shower facilities
- Kitchen/break rooms

## **Location**

3511 NE 2nd Street  
Renton, Washington 98056  
47 degrees 29 minutes 6 seconds N  
122 degrees 10 minutes 17 seconds W  
Elevation 368 feet



## **Telecommunications**

Redundant communications systems are key to the functioning of an ECC. A 150' high freestanding radio communications tower is located on site and a 43' tower is attached to the building just outside the coordination room. These towers along with more than 36 antennas and radio systems will provide a redundant source of communications during an emergency or disaster if normal telephone communications fail. The telephone service to the building has diverse routing to separate switching centers. Specifically, it has Self-Healing Network Services (SHNS). When this system detects a line failure, it automatically re-





routes telephone calls via other telecommunications routes to ensure that there is no loss of telephone service. The building is also served by several T1 lines that connect the ECC to the King County Courthouse and countywide automation systems. Fixed and portable satellite phones provide additional back-up communications capability.



The RCECC has connectivity with the county's Wide Area Network (WAN) and includes a Local Area Network (LAN) within the facility. E-mail services link the ECC with other response centers. Puget Sound Energy representatives maintain a computer system on site to monitor their power grid system and provide current system performance data for dissemination to public agencies. Radios are available also for: King County

Departments, Federal bureau of Investigation (FBI), Alcohol Tobacco and Firearms (ATF), QWEST, Washington Department of Transportation (WADOT), National Warning and Alert System (NAWAS), and Amateur, as well as a direct telephone hotline to the City of Seattle.

### **Back-up Systems**

Design of the electrical systems is based on a philosophy of essential redundancy; that is, power supply, interruption carryover, and critical equipment power delivery elements of the electrical systems have been duplicated

Systems include:

- Full generator backup of utility electrical supply
- Two backup 875KVA generators (either one can handle building load) and fuel tanks with a three day fuel supply.
- Redundant main power busses to allow building to operate during and after a failure of either bus.
- Uninterruptible Power Supply (UPS) units.
- Redundant branch circuits, served by each UPS, to critical equipment.
- Automatic transfer plug strips to select the viable UPS supply.
- Stores of up to 15,000 gallons of domestic water to be self sufficient for approximately three days



Actual equipment not shown. Sample only.

### **Equipment**

The building is serviced by audio paging systems and video monitors located throughout and full audio and video systems serving select rooms.

Coordination Room (3,637 Square Feet) consists of tables and chairs for 90+ people to respond to the public needs in the four functional areas of the coordination room: Plans, Coordination, Logistics and Finance. Each of the nine “pods” accommodates eight people. The ECC Supervisor and Coordination Lead, Logistics Lead and Information and Analysis Lead. Also in the Coordination room is the Message Center Cell and a Public Information Cell.



- Three large rear projection displays and multiple video monitors capable of displaying off-air signals, Direct Satellite System, Cable Television, and local sources such as videocassette recorders, digital videodisk players, computer images, and cameras.
- Three Break-Out Rooms and radio room capable of displaying independent video sources with distributed ceiling audio.
- Main room audio from a ceiling speaker cluster.
- Ability for seated occupants to independently tune in audio associated with room video or possibly from other sources.
- Cameras to capture room activities and for video teleconferencing.
- AV located outside for media connections by remote hook-ups.

#### Policy/Conference Room (381 Square Feet)

- One front projection screen and additional video monitors capable of displaying off-air signals, Direct Satellite System, Cable Television, and local sources such as videocassette recorders, digital videodisk players, computer images, and cameras.
- Room audio from a speaker cluster.
- Camera for video teleconferencing.
- Additional audio/video inputs and outputs.



#### Shared Training Room: (632 Square Feet)

- One front projection screen capable of displaying local sources such as VCR recorders, DVD players, and computer images.
- Room audio from distributed overhead speakers.
- Additional audio/video inputs and outputs.
- Camera for video teleconferencing.
- Connectivity to media trucks located outside.

### Three Break-out Rooms: (1,043 Square Feet Total)

- Movable Walls
- One TV in each breakout room.
- Tables and Chairs for 10 people in each room.
- Five telephones and three LAN computer network jacks in each room.

### Amateur Radio Room (570 Square Feet)

- Five radio operator positions
- 12 telephones.
- 12 LAN computer network jacks.
- Incoming and outgoing FAX Machines.
- Copy Machine.



### Cost Estimates

▪ Preliminary construction cost	\$12,000,000
▪ "Soft" costs*	3,500,000
▪ <u>Fixtures, Furniture, and Equipment (FF&amp;E)</u>	
○ King County Sheriff's Office	6,274,500
○ OEM (including audio-visual system of \$600,000)	824,000
○ Microwave system	700,000
○ Telecomm system	1,500,000
○ Other systems	250,000
▪ Appropriated Amount by Council	\$30,600,000
Total Final Costs Undetermined.	

\*Per industry standards, "soft" costs include such items as land acquisition, permitting, environmental mitigation, testing and inspection, project staffing, design fees, construction management fees, public art costs, and relocation costs.